



US009468316B1

(12) **United States Patent**
Johnson et al.

(10) **Patent No.:** **US 9,468,316 B1**
(45) **Date of Patent:** **Oct. 18, 2016**

(54) **UNDERFRAME ON A DISPLAY FIXTURE**

USPC 108/50.01, 50.02, 50.11, 28, 29, 30
See application file for complete search history.

(71) Applicant: **Target Brands, Inc.**, Minneapolis, MN (US)

(72) Inventors: **Jason W. Johnson**, Wayzata, MN (US);
Erin L. Zobel, Minneapolis, MN (US);
Timothy J. Martell, Brooklyn Park, MN (US); **Blake M. Johnson**, St. Paul, MN (US)

(73) Assignee: **Target Brands, Inc.**, Minneapolis, MN (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/666,783**

(22) Filed: **Mar. 24, 2015**

(51) **Int. Cl.**
A47B 37/00 (2006.01)
A47F 5/16 (2006.01)
G09F 3/20 (2006.01)
A47B 13/02 (2006.01)
A47F 5/00 (2006.01)
A47F 5/10 (2006.01)

(52) **U.S. Cl.**
CPC **A47F 5/16** (2013.01); **A47B 13/02** (2013.01); **A47F 5/0006** (2013.01); **A47F 5/10** (2013.01); **G09F 3/20** (2013.01)

(58) **Field of Classification Search**
CPC **A47F 5/16**; **A47F 5/0006**; **A47F 5/10**;
A47B 13/02; **A47B 13/16**; **A47B 37/00**;
A47B 21/00; **A47B 2200/0066**; **A47B 2200/008**

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,807,589 A	6/1931	Edmunds
2,606,666 A	8/1952	Gray
2,964,202 A	12/1960	Gingher et al.
2,971,651 A	2/1961	Shoffner
3,023,908 A	3/1962	Ramey
3,252,583 A	5/1966	Walther et al.
3,730,355 A	5/1973	Feldman
4,673,089 A	6/1987	Chap
D352,413 S *	11/1994	Ballard D6/553
5,769,514 A *	6/1998	Brown A47B 3/08
		108/129
5,913,499 A *	6/1999	Kiggins A47F 5/0823
		248/200
6,082,838 A *	7/2000	Bissu-Palombo A47B 3/12
		108/115
6,099,094 A *	8/2000	Lior A47B 21/00
		108/50.01

(Continued)

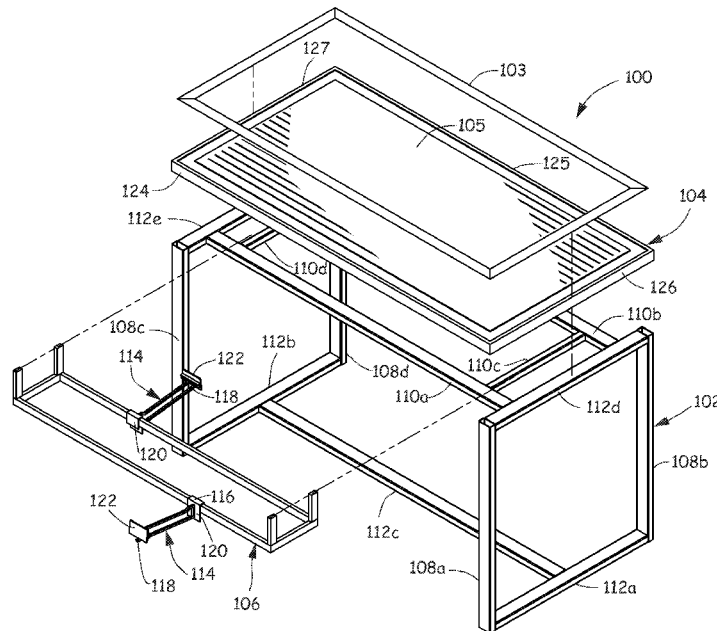
Primary Examiner — Jose V Chen

(74) Attorney, Agent, or Firm — Leanne Taveggia Farrell; Westman, Champlin & Koehler, P.A.

(57) **ABSTRACT**

A display fixture includes a main support frame, a table top supported by the main support frame, an underframe attached to the main support frame and located underneath the table top and at least one display hook that supports hanging products. The at least one display hook has a proximal end and a distal end. The proximal end is removably coupled to and supported by the underframe.

16 Claims, 6 Drawing Sheets



(56)	References Cited				2003/0010260	A1 *	1/2003	Chang	A47B 17/00 108/50.01
	U.S. PATENT DOCUMENTS				2004/0060485	A1 *	4/2004	Chang	A47B 83/001 108/50.01
	6,942,112	B2	9/2005	Robbins, III	2005/0103238	A1	5/2005	Paventi	
	6,969,036	B2	11/2005	Magnusson	2006/0065163	A1 *	3/2006	Chi	A47B 21/03 108/7
	6,997,115	B2 *	2/2006	Lockwood					A47B 21/03 108/115
	7,429,024	B2	9/2008	Boklund-Moran	2006/0249057	A1 *	11/2006	Meyer	B25H 1/14 108/50.01
	7,559,522	B1 *	7/2009	Hlatky					A47B 23/02 108/1
	7,966,951	B1 *	6/2011	Black					H02G 3/128 108/50.01
	8,196,525	B2 *	6/2012	Flanet					A47B 17/00 108/28
	8,312,820	B2 *	11/2012	Rotlevi					A47B 21/00 108/50.01
					* cited by examiner				

* cited by examiner

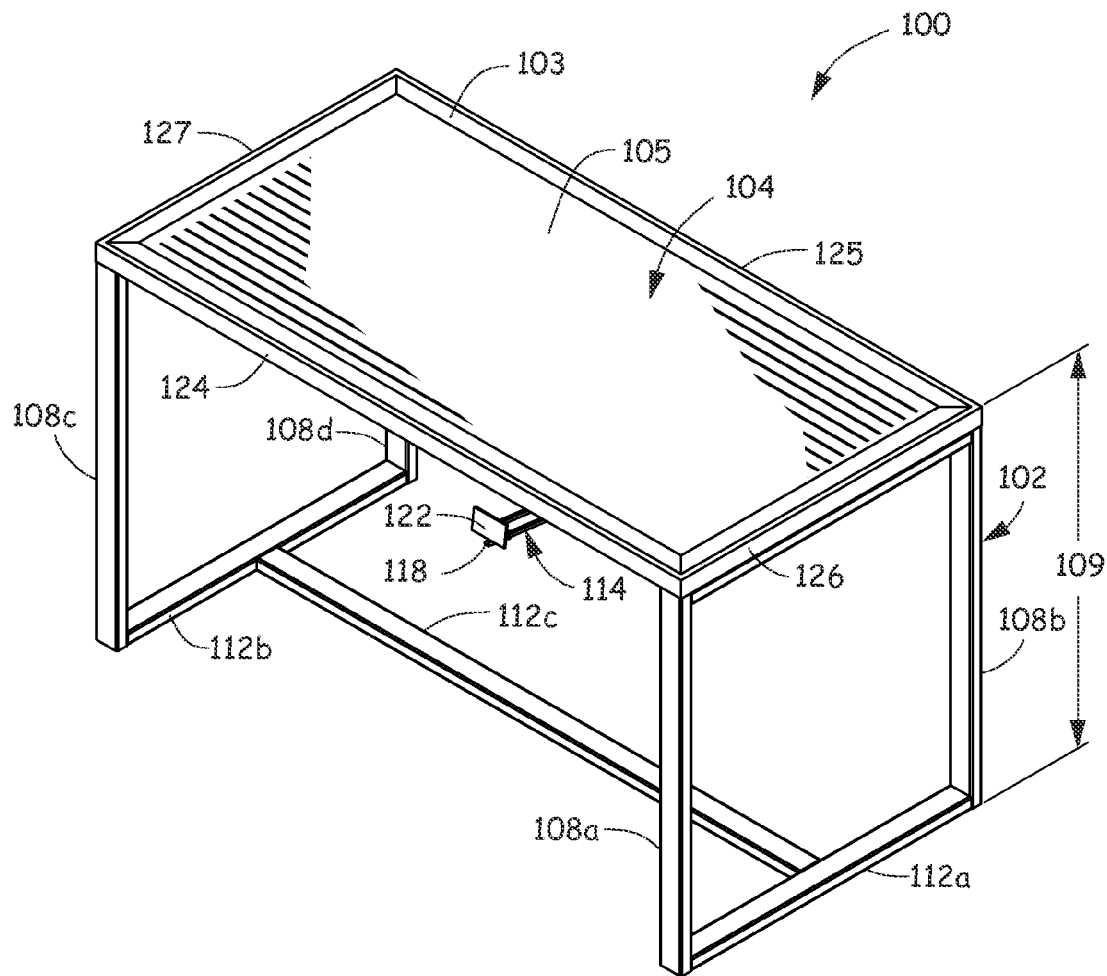


Fig. 1

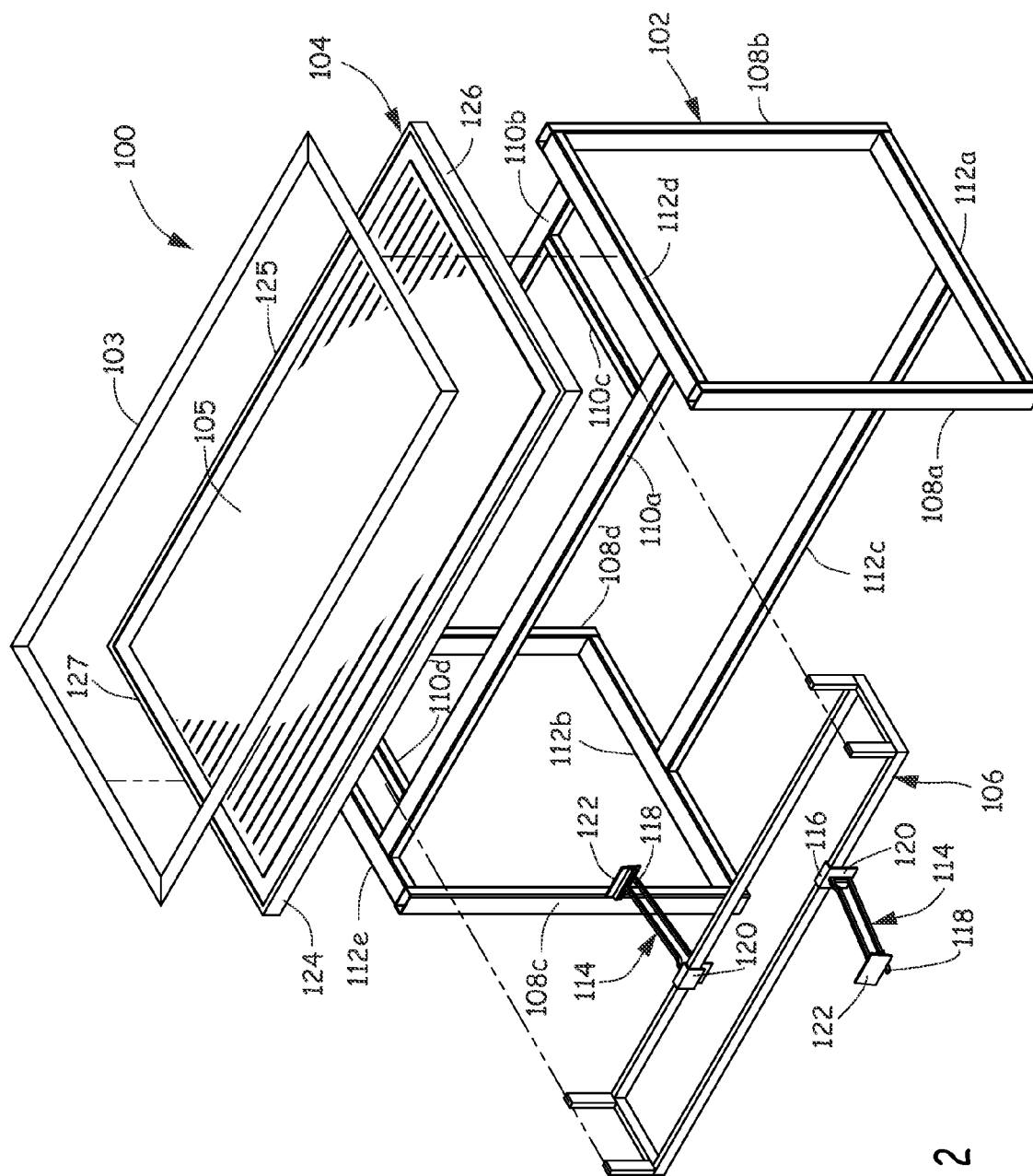
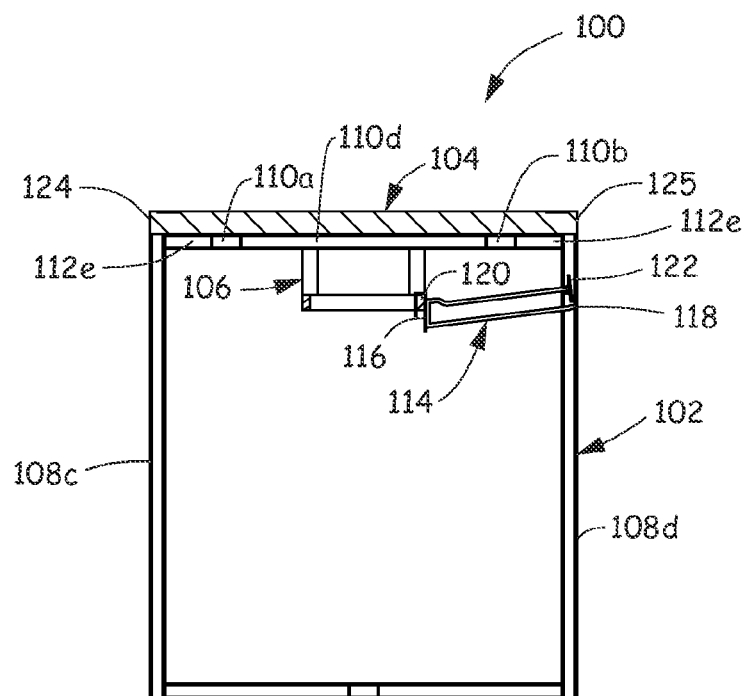
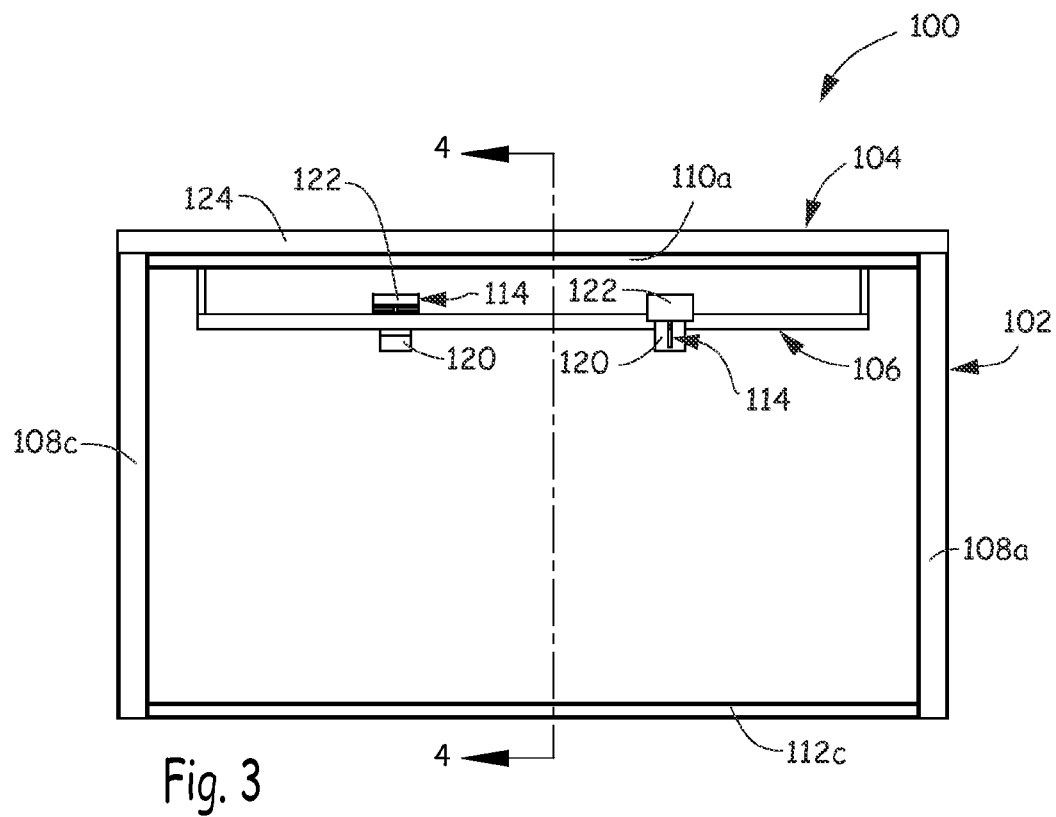


Fig. 2



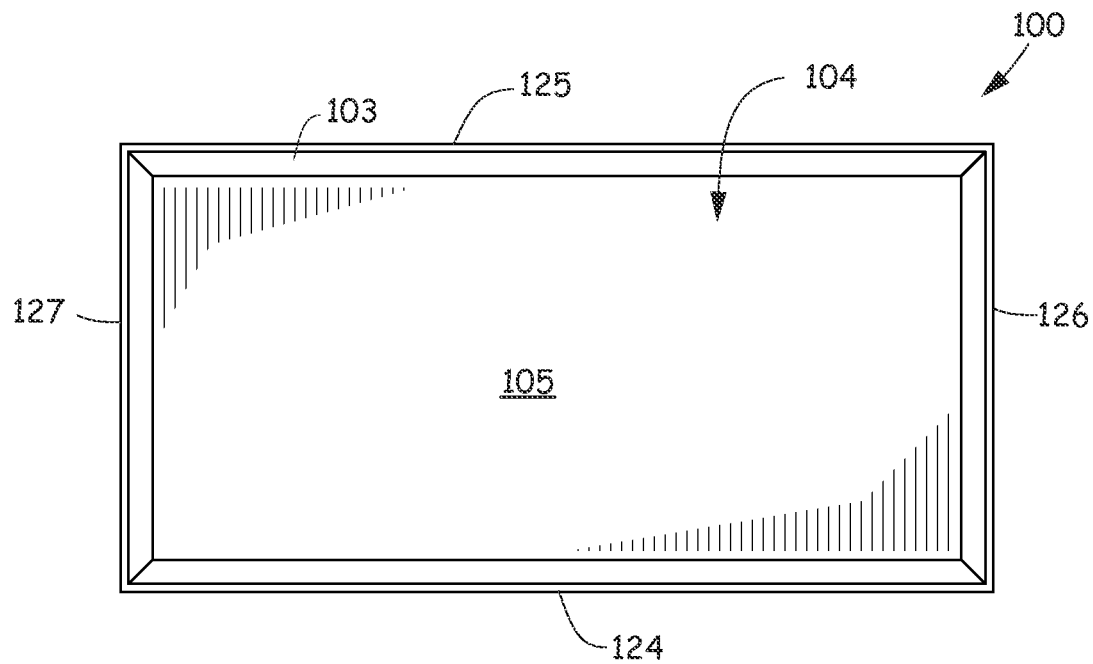


Fig. 5

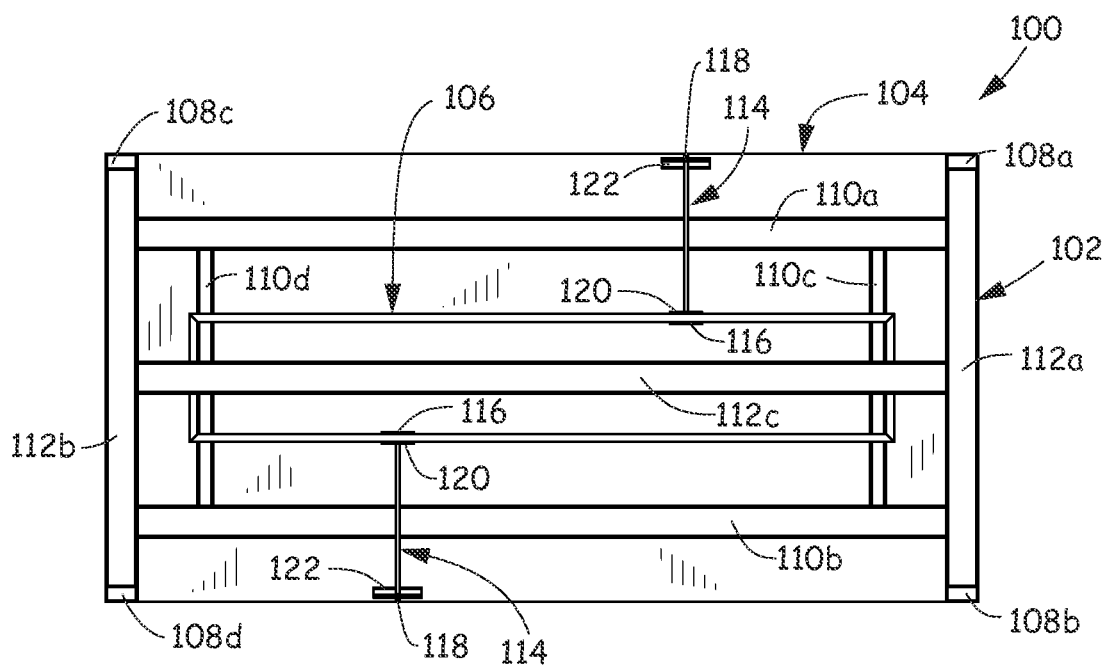


Fig. 6

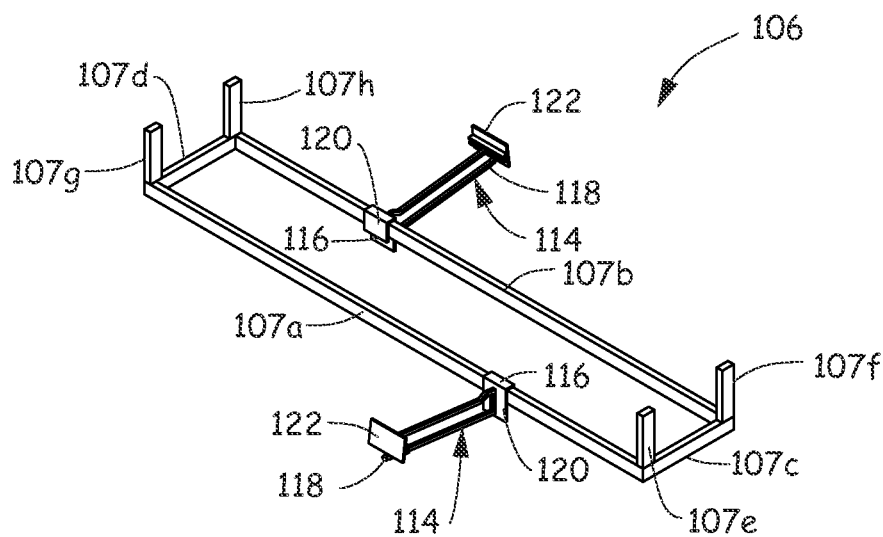


Fig. 7

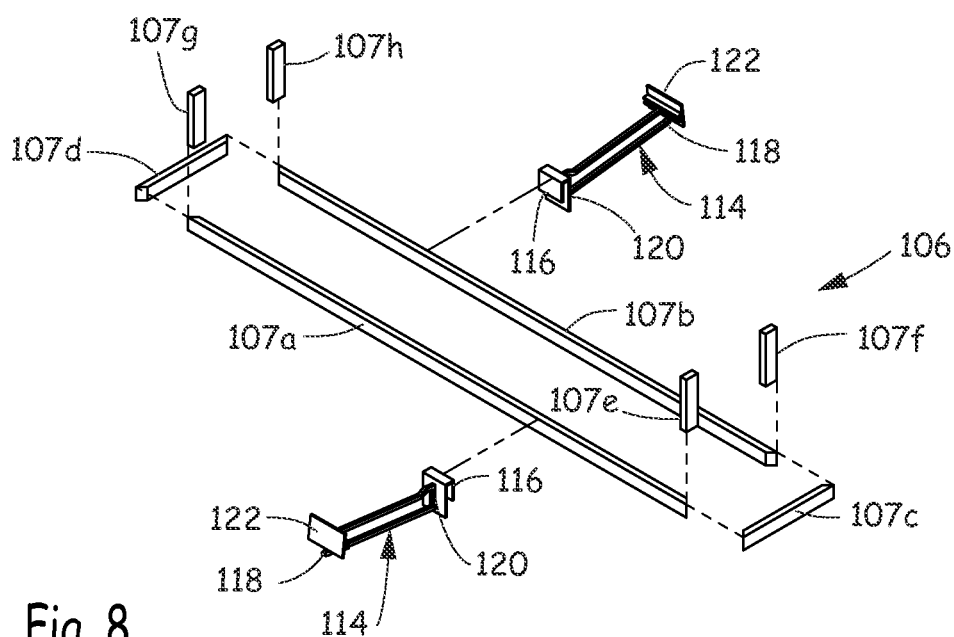
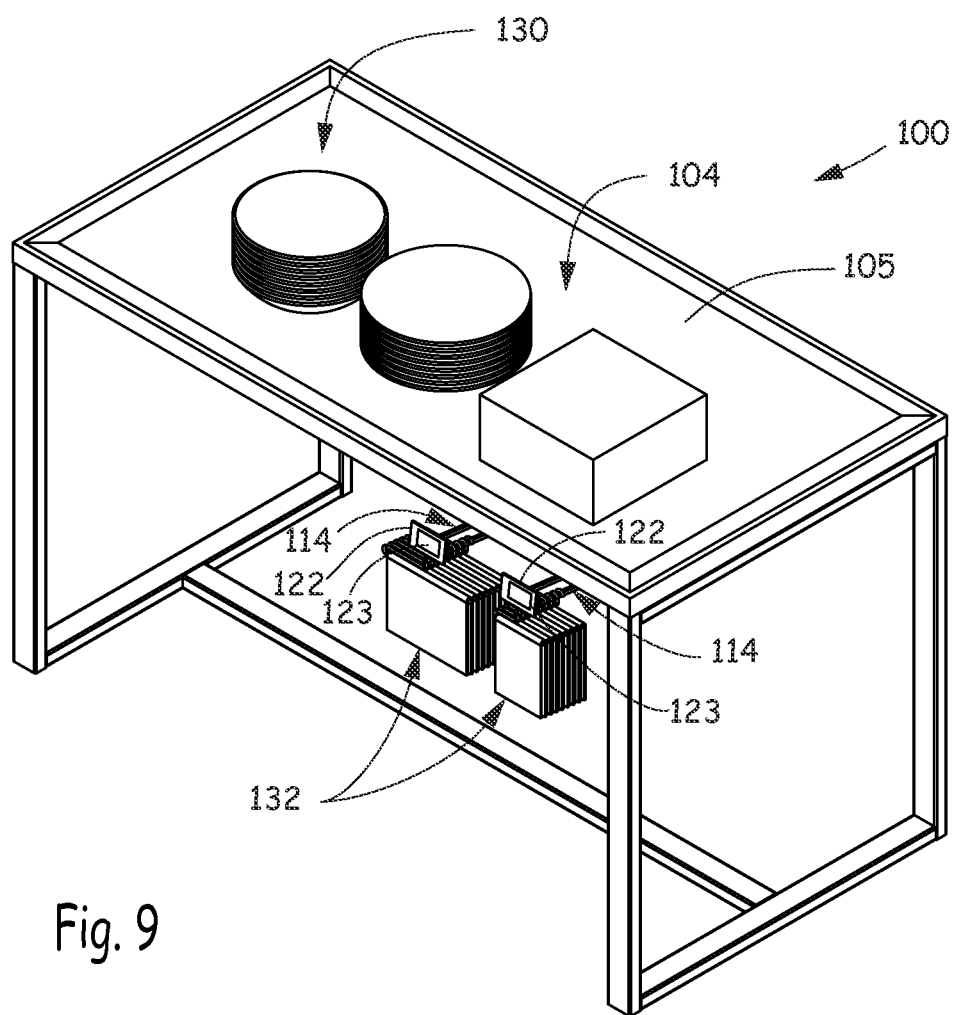


Fig. 8



1

UNDERFRAME ON A DISPLAY FIXTURE**BACKGROUND**

Businesses, such as retail stores, use a variety of types of display structures to present products to customers for purchase. An example type of display structure is a shelf or table for holding products. Another example type of display structure is a display hook used to support hanging products. Exemplary display hooks include hooks for mounting to cross bars or cross wire supports, hooks for mounting to peg boards and hooks for mounting to slatted walls.

The discussion above is merely provided for general background information and is not intended to be used as an aid in determining the scope of the claimed subject matter.

SUMMARY

A display fixture includes a main support frame, a table top supported by the main support frame, an underframe attached to the main support frame and located underneath the table top and at least one display hook that supports hanging products and has a proximal end and a distal end. The proximal end is removably coupled to and supported by the underframe.

A display fixture includes a plurality of legs, a plurality of cross members. At least one of the plurality of cross members couple at least two of the plurality of legs together. A table top is located on top of the plurality of cross members, is supported by the plurality of cross members and the plurality of legs and is configured to support merchandise for display. The display fixture further includes a saddle frame having a plurality of support members coupled to a bottom of at least one of the cross members and is located under the table top and at least one display arm cantilevered from one of the support members of the saddle frame so that a distal end of the display arm is in view and a proximal end of the display arm is hidden from view by the table top. The display arm supports merchandise for display.

A method of displaying products on a display fixture includes setting products on an upper surface of a table top of a display fixture and loading hanging products on display hooks located under the table top of the display fixture. A proximal end of each display hook is removably coupled to an underframe located under the table top and a distal end of each display hook includes a label holder. Each label holder is located below an end of the table top.

This Summary is provided to introduce a selection of concepts in a simplified form that are further described below in the Detailed Description. This Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used as an aid in determining the scope of the claimed subject matter. The claimed subject matter is not limited to implementations that solve any or all disadvantages noted in the background.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a display fixture according to one embodiment.

FIG. 2 is an exploded perspective view of the display fixture in FIG. 1.

FIG. 3 is a front view of the display fixture in FIG. 1.

FIG. 4 is a section view of the display fixture in FIG. 1 and taken through the line indicated in FIG. 3.

FIG. 5 is a top view of the display fixture in FIG. 1.

FIG. 6 is a bottom view of the display fixture in FIG. 1.

2

FIG. 7 is a perspective view of an underframe of the display fixture in FIG. 1.

FIG. 8 is an exploded perspective view of the underframe in FIG. 7.

FIG. 9 is another perspective view of the display fixture in FIG. 1 with product sitting on the table top and hanging products loaded on the display hooks.

DETAILED DESCRIPTION

A display fixture includes a main support frame, a table top supported by the main support frame and an underframe or saddle frame located underneath the table top and coupled to the main support frame. The table top generally holds and displays products or merchandise that are piled on top of each other or otherwise arranged in some type of order. Display hooks mounted to the underframe below the table generally hold hanging products that are loaded on the display hooks from back to front. In this way, not only can items be displayed on the table top, but items can also be displayed from the hooks protruding from underneath the table so that the display fixture provides cross-merchandising of related products that require two different modes of display. For example, dishware can be displayed on the table top while linens, such as tablecloths and napkins, can be displayed from the display hooks underneath the table top.

FIG. 1 is a perspective view of a display fixture 100 according to one embodiment and FIG. 2 is an exploded perspective view of display fixture 100. FIGS. 3, 5 and 6 are front, top and bottom views, respectively, of display fixture 100 and FIG. 4 is a section view of display fixture 100 taken through the line indicated in FIG. 3. Display fixture 100 includes a main support frame 102, a table top 104, an underframe or saddle frame 106 and at least one display hook 114. Main support frame 102 supports table top 104 as well as underframe 106 and underframe 106 supports each display hook 114.

Main support frame 102 includes a plurality of legs 108a, 108b, 108c and 108d, a plurality of table top support cross members 110a, 110b, 110c and 110d and a plurality of leg support cross members 112a, 112b, 112c, 112d and 112e. Legs 108a-108d are vertically oriented members that define a height 109, which is the distance between an upper surface 105 of table top 104 and the floor or how far above the floor upper surface 105 is located. All other members 110a-d and 112a-e are horizontally oriented members that connect legs 108a-d or provide cross support to legs 108a-d or to table top 104.

Legs 108a and 108b are coupled together by leg support cross member 112a at their bottoms and leg support cross member 112d at their tops. Legs 108c and 108d are coupled together by leg support cross member 112b at their bottoms and leg support cross member 112e at their tops. In addition, leg support cross member 112c couples leg support cross member 112a to leg support cross member 112b and therefore indirectly the bottoms of legs 108a and 108b to legs 108c and 108d. Table top support cross members 110a and 110b couple leg support cross member 112d to leg support cross member 112e and therefore indirectly the tops of legs 108a and 108b to legs 108c and 108d. Further, table top support cross members 110a and 110b provide horizontal support for table top 104. Table top support cross members 110c and 110d connect cross member 110a and 110b and provide anchoring pointed for underframe or saddle frame 106.

FIG. 7 is a perspective view of underframe or saddle frame 106 supporting display hooks 114 and FIG. 8 is an

exploded perspective view of underframe or saddle frame **106**. Underframe **106** includes a plurality of support members including at least one cross member or cross bar. In particular and in the embodiment illustrated in FIGS. 1-8, underframe **106** includes a plurality of support members **107a-h**. As illustrated in FIGS. 7 and 8, support members are substantially parallel to each other and are connected to each other by support member **107c** at one end and by support member **107d** at the opposite end to form a rectangular shape. At each corner of the rectangle, support members **107e**, **107f**, **107g** and **107h** extend upwardly so as to be mounted to an underside of cross members of main support frame **102**.

After underframe **106** is mounted to main support frame **102**, support members **107a** and **107b** become cross members or cross bars that extend in a direction that is horizontally oriented and substantially parallel with table top cross members **110a** and **110b** of main support frame **102**. However, support members **107a** and **107b** are shorter than table top cross members **110a** and **110b** and are centered with respect to table top cross members **110a** and **110b**. Support members **107c** and **107d** of underframe **106** are also horizontally oriented and, as described above, couple the ends of cross member or cross bar **107a** to the ends of cross member or cross bar **107b**. Support members **107e-h** of underframe **106** are vertically oriented and couple the ends of cross members or cross bars **107a** and **107b** and the ends of support member **107c** and **107d** to main support frame **102** so that underframe **106** is attached to bottoms of table top support members **110c** and **110d**. In this way, underframe **106** is located underneath table top **104**, which sits on top of main support frame **102** or on top of cross members **110a**, **110b**, **110c**, **110d**, **112d** and **112e**, and extend downwardly from support member **110c** and **110d**.

Table top **104** includes upper surface **105**, a front end **124**, a back end **125** and a pair of opposing side ends **126** and **127**. Table top **104** further includes a perimeter label holder **103**. Label holder **103** receives labels that describe the product being displayed on upper surface **105** of table top **104** including at least a price. Perimeter label holder runs adjacent to all four ends of table top **104** including front end **124**, back end **125**, right side end **126** and left side end **127**.

As illustrated in FIGS. 1-8, display fixture **100** further includes at least one display hook or display arm **114** that supports hanging products. Each display hook or display arm **114** is cantilevered from a support member of underframe **106** and includes a proximal end **116** and a distal end **118**. Proximal end **116** of display hook **114** is removably coupled to and supported by underframe **106**. More particularly, proximal end **116** of display hook **114** includes a bracket **120**. Bracket **120** slides over cross member or cross bar **107a** or **107b** of underframe **106** and removably couples proximal end **116** of display hook **114** to underframe **106**. As illustrated in FIGS. 2, 4, 6, 7 and 8, bracket **120** includes an open bottom, two opposing flanges and a top. The cross member or cross bar **107a** or **107b** is received by bracket **120** through the open bottom, the top of bracket **120** rests on the cross member or cross bar **107a** and **107b** and the flanges of bracket **120** straddle either side of the cross member or cross bar **107a** and **107b**. It should be realized, however, that each display hook **114** can be removably coupled or removably mounted to underframe **106** in other ways.

As illustrated in FIGS. 1-4 and 6-8, distal end **118** of display hook **114** includes a label holder **122**. Label holder **122** holds a label that describes the products hanging on display hook **114** including a price and other relevant information. As shown, display hook **114** extends from

proximal end **116**, which is coupled to underframe **106** and terminates at distal end **118**, which is directly below an end of table top **104** so that label holder **120** is viewable to a customer, but proximal end **116** is hidden from view. As illustrated in FIGS. 1 and 6, proximal end **118** of one display hook **114** is located directly below front end **124** of table top **104**. As illustrated in FIGS. 4 and 6, proximal end **118** of one display hook **114** is located directly below back end **125** of table top **104**.

Although display fixture **100** only shows two display hooks **114**, it should be realized that more or fewer than the two display hooks can be used. Regardless of how many, each distal end **118** of each display hook **114** is located directly below front or back ends **124** and **125** of table top **104**. In fact, as illustrated in the figures, at least one first display hook **114** extends from proximal end **116** that is removably coupled to first cross member or first cross bar **107a** of underframe **106** and terminates at distal end **118** located under front end **124** of table top **104**. At least one second display hook **114** extends from proximal end **116** that is removably coupled to second cross member or second cross bar **107b** of underframe **106** and terminates at distal end **118** located under back end **125** of table top **104**.

Still further, while FIGS. 1-8 illustrate a display hook **114** mounted to cross member **107a** of underframe **106** and a display hook **114** mounted to cross member **107b** of underframe **106**, it is also possible for a display hook **114** to be mounted to support member **107c** and for a display hook **114** to be mounted to support member **107d**. In this way, a distal end **118** of a display hook **114** can be located directly below the opposing side ends **126** and **127** of table top **104**. More specifically, at least one third display hook **114** can extend from a proximal end **116** that is removably coupled to support member **107c** of underframe **106** and terminate at a distal end **118** located under side end **126** of table top **104** and at least one fourth display hook **114** can extend from a proximal end **116** that is removably coupled to support member **107d** of underframe **106** and terminate at a distal end **118** located under side end **127** of table top **104**.

FIG. 9 is another perspective view of display fixture **100** with product or merchandise **130** sitting on table top **104** and hanging products **132** loaded on display hooks or arms **114**. Display fixture **100** provides a method of displaying products. Products or merchandise **130** are set on an upper surface **105** of table top **104**. Hanging products **132** are loaded onto display hooks or arm **114**. Proximal ends **116** (shown in FIGS. 7 and 8) are removably coupled to underframe **106** located under table top **104**. This allows display hooks **114** to be placed anywhere along cross members or cross bars **107a** and **107b** and be rearranged as needed. More specifically, each display hook **114** is attached to underframe **106** using bracket **120**.

Distal ends **118** (shown in FIGS. 7 and 8) include label holders **122** and each label holder **122** is located directly below either a front or a back end of table top **104**. As illustrated in FIG. 9, labels **123** are placed in label holders **122**. Each label **123** describes the hanging products or merchandise being displayed by each display hook **114** and includes at least a price. When loading products or merchandise on display hooks **114**, each display hook is loaded from proximal end **116** to distal end **118**.

Although elements have been shown or described as separate embodiments above, portions of each embodiment may be combined with all or part of other embodiments described above.

Although the subject matter has been described in language specific to structural features and/or methodological

5

acts, it is to be understood that the subject matter defined in the appended claims is not necessarily limited to the specific features or acts described above. Rather, the specific features and acts described above are disclosed as example forms of implementing the claims.

What is claimed is:

1. A display fixture comprising:
 - a main support frame;
 - a table top supported by the main support frame;
 - an underframe attached to the main support frame and located underneath the table top wherein the underframe comprises a first cross bar and a second cross bar spaced apart from and substantially parallel to the first cross bar;
 - a first display hook that supports hanging products and extends from a proximal end that is removably coupled to the first cross bar and terminates at a distal end; and
 - a second display hook that supports hanging products and extends from a proximal end that is removably coupled to the second cross bar and terminates at a distal end.
2. The display fixture of claim 1, wherein the underframe comprises a plurality of support members coupled together including the first and second cross bars.
3. The display fixture of claim 2, wherein the proximal ends of each display hook includes a bracket, wherein the bracket slides over one of the first cross bar and the second cross bar of the underframe to removably couple the proximal ends of the display hooks to the underframe.
4. The display fixture of claim 1, wherein the distal ends of each display hook comprises a label holder that holds a label describing the hanging products on each display hook.
5. The display fixture of claim 4, wherein each display hook extends from the proximal end coupled to the underframe and terminates at the distal end below an end of the table top so that the label holder is viewable to a customer and the proximal end is hidden from view from the customer.
6. The display fixture of claim 1, wherein the main support frame comprises a plurality of legs and at least one cross member, wherein the table top is located on top of the at least one cross member.
7. The display fixture of claim 6, wherein the underframe is coupled to a bottom of the at least one cross member.
8. The display fixture of claim 1, wherein the distal end of the first display hook is located under a first end of the table top and wherein the distal end of the second display hook is located under a second end of the table top that is opposite the first end of the table top.
9. A display fixture comprising:
 - a plurality of legs;
 - a plurality of cross members, wherein at least one of the plurality of cross members couple at least two of the plurality of legs together;
 - a table top located on top of the plurality of cross members, is supported by the plurality of cross members and the plurality of legs and is configured to support merchandise for display;
 - a saddle frame having a plurality of support members, is coupled to a bottom of at least one of the plurality of cross members and is located under the table top, wherein the plurality of support members comprise a

6

- first cross bar and a second cross bar spaced apart from and substantially parallel to the first cross bar; and
 - a first display arm supporting merchandise for display, extending from a proximal end to a distal end and being cantilevered from the first cross bar of the saddle frame, the proximal end of the first display arm being removably coupled to the first cross bar and hidden from view by the tabletop and the distal end of the first display arm being in view;
 - a second display arm supporting merchandise for display, extending from a proximal end to a distal end and being cantilevered from the second cross bar of the saddle frame, the proximal end of the second display arm being removably coupled to the second cross bar and hidden from view by the tabletop and the distal end of the second display arm being in view.
10. The display fixture of claim 9, wherein the proximal end of each display arm includes a bracket, wherein each bracket slides over one of the first and second cross bars of the saddle frame to removably couple each of the proximal ends of each of the first and second display arms to the saddle frame.
 11. The display fixture of claim 9, wherein the distal end of each of the first and second display arms terminate below an end of the table top.
 12. The display fixture of claim 9, wherein the distal end of each of the first and second display arms comprises a label holder that holds a label describing the merchandise being displayed by the corresponding display arm.
 13. The display fixture of claim 9, wherein the distal end of the first display arm is located under a first end of the table top and wherein the distal end of the second display arm is located under a second end of the table top that is opposite the first end of the table top.
 14. A method of displaying products on a display fixture, the method comprising:
 - setting products on an upper surface of a table top of a display fixture; and
 - loading hanging products on display hooks located under the table top of the display fixture, wherein a first display hook extends from a proximal end removably coupled to a first cross bar of an underframe located under the table top and terminates at a distal end located under a first end of the table top and wherein a second display hook extends from a proximal end removably coupled to a second cross bar that is spaced apart from and substantially parallel to the first cross bar and terminates at a distal end located under a second end of the table top that is opposite the first end of the table top wherein the distal end of each of the first and second display hooks includes a label holder and each label holder is located below an end of the table top.
 15. The method of claim 14, further comprising placing a label in each label holder that describes the products hanging from the display hook to which the label holder is attached.
 16. The method of claim 14, further comprising attaching the display hooks located under the table top of the display by sliding a bracket located on the proximal end of each display hook over a portion of the underframe to removably couple each proximal end of each display hook to the underframe.

* * * * *